In the Claims:

Please substitute claims 1-16 and 19-20 presented below for claims 1-16 and 19-20 previously presented. The claims presented here reflect the claim amendments made in the Examiner's Amendment dated March 3, 2005. Claims 17-18 have been canceled by the Examiner's Amendment dated March 3, 2005. Currently amended claims are shown with additions underlined and deletions in ~~strikethrough~~. No new matter is added by these amendments.

1. (Currently amended) A method of calibrating a brake system for stationary equipment, comprising:

applying a first input signal having a value to a specific brake of the brake system, thea specific brake being coupled to a shaft and configured to provide a first brake output to the shaft in response to the first input signal;

determining a value of a first threshold output associated with the value of the first input signal, the value of the first threshold output being the amount of force that moves the shaft with respect to a housing when the first input signal is applied to the brake;

storing in a memory uniquely associated with the brake, an association of the value of the first input signal and the value of the first threshold output;

applying a second input signal having a value to the brake, the brake configured to provide a second brake output to the shaft in response to the second input signal;

determining a value of a second threshold output associated with the value of the second input signal, the second threshold output being the amount of force that moves the shaft with respect to the housing when the second input signal is applied to the brake; and

storing in the memory an association with the value of the second input signal and the value of the second threshold output.

2. (Original) The method of claim 1, wherein the brake system is disposed within a medical rehabilitation device, the medical rehabilitation device configured to receive input signal values from a therapy user.

3. (Original) The method of claim 1, wherein the further comprising:

receiving a desired threshold output, the desired threshold output having a value; and

calculating a value of a third input signal needed to be provided to the brake so that the brake provides a third brake output such that the desired threshold output is required to move the shaft with respect to the housing.

4. (Original) The method of claim 3, further comprising:

applying a fourth input signal having a value to the brake, the brake configured to provide a fourth brake output to the shaft in response to the fourth input signal;

determining a value of a third threshold output associated with the fourth input signal, the value of the third threshold output being the amount of force that moves the shaft with respect to the housing when the fourth input signal is applied to the brake system;

storing in the memory, an association of the value of the fourth input signal and the value of the third threshold output; and

determining whether the value of the desired threshold output is between the value of the first threshold output and the value of the second threshold output or between the value of the second threshold output and the value of the third threshold output.

5. (Original) The method of claim 3, wherein the calculating includes interpolating between the association of the value of the first input signal and the value of the first threshold output and the association of the value of the second input signal and the value of the second threshold output.

6. (Original) The method of claim 1, wherein the determining the value of the first threshold output includes rotating the shaft with respect to the housing to find a slip point of the brake system.

7. (Original) The method of claim 1, wherein the first input signal is a voltage.

8. (Original) The method of claim 1, wherein the first input signal is a hydraulic pressure.

9. (Original) The method of claim 1, wherein the first input signal is a pneumatic pressure.

10. (Previously presented) An apparatus, comprising:

a shaft coupled to a housing and configured to move with respect to the housing;

a specific brake configured to receive a plurality of input signals and to modify a motion of the shaft with respect to the housing in response to the plurality of input

signals, each input signal having a value, each input signal from the plurality of input signals being uniquely associated with a brake output, each brake output from the plurality of brake outputs being uniquely associated with a threshold output, a value of each threshold output being an amount of force that moves the shaft with respect to the housing when the associated brake output is produced by the brake;

a memory uniquely associated with the brake and configured to store a plurality of input-signal-value/threshold-output-value associations for the brake; and

a processor coupled to the memory and the brake, the processor being configured to interpolate an input signal value based on a threshold output value and the input-signal-value/threshold-output-value associations.

11. (Original) The apparatus of claim 10, wherein the brake is disposed with a medical rehabilitation device.

12. (Original) The apparatus of claim 10, wherein the brake is an electrical brake and the input signal is a voltage.

13. (Original) The apparatus of claim 10, wherein the brake is a hydraulic brake and the input signal is a pressure.

14. (Original) The apparatus of claim 10, wherein the brake is a pneumatic brake and the input signal is a pressure.

15. (Original) The apparatus of claim 10, wherein the brake is a mechanical brake and the input signal is a force.

16. (Original) The apparatus of claim 10, wherein the shaft is configured to rotate with respect to the housing.

17.-18. (Canceled)

19. (Currently amended) Processor-readable code stored on a processor-readable medium, the processor-readable code comprising:

code to send a first input signal having a value to a specific brake of a brake system coupled to a shaft and configured to provide an output to the shaft,

code to determine a value of a first threshold output based on the first input, the value of the first threshold output being associated with an amount of force that moves the shaft when the first input signal is provided to the brake of the brake system;

code to store an association of the value of the first input signal and the value of the first threshold output;

code to send a second input signal having a value to the brake of the brake system;

code to determine a value of a second threshold output based on the second input signal, the second threshold output being associated with an amount of force that moves the shaft when the second input signal is provided to the brake of the brake system~~shaft~~; and

code to store an association with the value of the second input signal and the value of the second threshold output.

20. (Previously presented) A method of calibrating a brake system, comprising:

applying a first input signal having a value to a specific brake of the brake system, the specific brake being coupled to a shaft and configured to provide a first output to the shaft in response to the first input, the first output having a value;

determining the value of the first brake output;

storing in a memory uniquely associated with the brake, an association of the value of the first input signal and the value of the first output;

applying a second input signal having a value to the brake, the brake configured to provide a second output to the shaft in response to the second input signal, the second output having a value;

determining the value of a second output; and

storing in the memory an association with the value of the second input signal and the value of the second output.